Output, demand and the labour market

#### Box

### A COMPARISON OF THE CURRENT RECESSION IN THE EURO AREA ECONOMY AND ITS TWO MAIN BRANCHES WITH PAST PERIODS OF RECESSION

Recent GDP data indicate that the recession in the euro area deepened significantly in the last quarter of 2008. Euro area GDP contracted by 1.5% on a quarterly basis, following smaller quarterly declines of 0.2% and 0.3% in the previous two quarters. The 1.5% contraction in the fourth quarter represents one of the sharpest quarterly falls in euro area GDP since 1970. A sharper contraction was recorded only in the recession of 1974-75, when GDP posted a quarterly fall of 1.6% in the fourth quarter of 1974. Against this background, this box puts the recent developments in euro area activity up to the fourth quarter of 2008 into historical perspective compared with past periods of euro area recession since 1970, comparing also recent activity developments in the two largest economic branches – industry and services – across these periods.

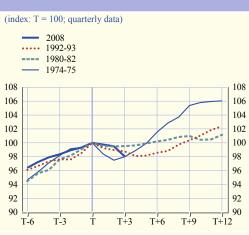
#### Euro area real GDP across recessions

As a rule of thumb, because of its simplicity, periods of two consecutive quarters of negative quarterly growth rates are often considered by the media to constitute a recession. However, there is no universally accepted and mechanical approach to dating recessions. Generally speaking, recessions are dated using a broad set of variables, where a significant decline in the level of overall economic activity is one essential element. A recession then starts just after an economy reaches a peak and ends when the economy reaches a trough. In the euro area, a private group, the Euro Area Business Cycle Dating Committee of the Centre for Economic Policy Research (CEPR), has so far identified three past recessions for the euro area economy: from

the third quarter of 1974 to the first quarter of 1975, from the first quarter of 1980 to the third quarter of 1982 and from the first quarter of 1992 to the third quarter of 1993. In addition, the period from the first quarter of 2003 to the second quarter of 2003 has been characterised as "a prolonged pause in the growth of economic activity rather than a fully-fledged recession". As regards the current recession, the CEPR has recently said that it started in the first quarter of 2008.

Chart A provides a comparison of the developments in euro area GDP in the current recession up to the fourth quarter of 2008 with those in the past three recessions, where T marks the peak of the respective cycles. The comparison highlights the uniqueness of each of the past euro area recessions in terms of their length, pattern and severity.

Chart A Comparison of euro area GDP across recessions



Sources: Eurostat, AWM database and ECB calculations. Note: T represents the peak in activity before the respective recessions. The dates of the peaks are Q3 1974, Q1 1980, Q1 1992 and Q1 2008.

<sup>1</sup> See http://www.cepr.org/data/dating.

Extending just over two quarters, the recession in the 1970s was sharp, but relatively short. That of the 1990s was somewhat less steep, but at the same time much longer, while the shallowest recession, followed by a very slow upswing, was recorded in the 1980s.

In the current recession, after two quarters of milder declines, the intensification of the financial crisis in September 2008 triggered a sharp acceleration in the contraction of euro area GDP in the fourth quarter of 2008. The current recession is, up to the fourth quarter of 2008, already longer than the 1970s recession and the output losses from peak to trough are, up to the same quarter, more severe than those in the 1980s recession, similar to those of the 1990s recession and relatively close to the magnitude recorded in the 1970s recession. Moreover, looking beyond the fourth quarter of 2008, the ongoing very adverse developments in available short-term economic indicators for the first three months of 2009 suggest that developments up to the first quarter of this year may already make it the most severe recession of all since 1970 in terms of output losses from peak to trough.

### Activity in the euro area industrial and services sectors across recessions

A glance at the pattern of activity developments in the two largest economic sectors during recessions highlights the highly cyclical industrial sector as the main driver behind the falls in GDP during all recessions (see Charts B and D). By contrast, growth in services activities, which account, with 70%, for a much larger share of euro area value added than industry (20%), tends to slow during recessions, but services activity very rarely actually declines. While services activities also include components which show a relatively high degree of cyclicality such as the trade and transportation category, services activities, in general, and government-related services activities such as education and health, in particular, tend to display much smaller fluctuations than activity in industry.

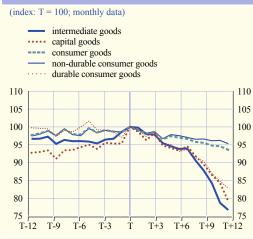
## Chart B Comparison of euro area industrial production (excluding construction) across recessions

(index: T = 100; monthly data)



Sources: Eurostat, ECB and ECB calculations. Note: T represents the peak in industrial production before the respective recessions. The dates of the peaks are June 1974, February 1980, November 1991 and January 2008.

## Chart C Comparison of production across the main industrial groupings in the current recession



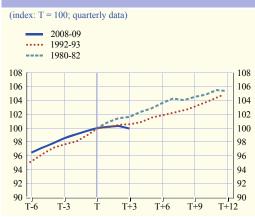
Sources: Eurostat and ECB calculations. Note: T represents the peak in total industrial production before the 2008 recession (January 2008).

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The comparison of developments in euro area industrial production (excluding construction) across recessions shows that the fall in industrial activity from its peak in the current recession was, already up to January 2009, clearly stronger than in any of the previous recessions. The decline in production over the past year was widely shared across the main industrial groupings, although the most pronounced falls were so far recorded in the intermediate goods industries (see Chart C). Also, capital goods production declined sharply, but large order books at the start of the recession may have helped to mitigate the contraction in production in that sector somewhat. Moreover, in line with previous recessions, consumer goods production decreased as well, albeit more moderately than in the other industries, reflecting the lower cyclicality in demand for these goods. This reflects milder falls in non-durable consumer goods production, whereas the contraction in production in the small category of durable consumer goods was almost as strong as that in the capital goods industry.

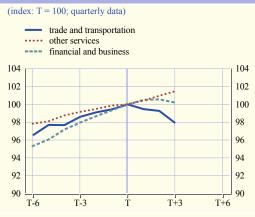
A comparison of the current recession with past periods of recession for services is particularly difficult, as the official data on euro area value added in services currently only start from 1995. Data for earlier periods can be approximated by retropolating the official time series to 1980 on the basis of historical data for the euro area as well as for West Germany, France, Italy and Spain. During the 1980s recession, services growth remained brisk. Developments in services value added during the current recession follow, up to the third quarter of 2008, the same pattern seen in the 1990s recession (see Chart D). Euro area services value added growth averaged 0.2% per quarter over four quarters following the peak in the 1990s recession. Thereafter, it picked up again. The current recession's three-quarter average growth stands at 0.0% and surveys point to a further deceleration in services activity in the first quarter of 2009. This would make the current recession the most severe seen for the services sector since at least 1980. Over the past year, trade and transportation services, in particular, show negative quarterly growth rates. Financial and business services show a negative growth rate in the fourth quarter of 2008. Other services, which include, in particular, government services, continue to grow (see Chart E).

### Chart D Comparison of euro area services value added across recessions



Sources: Eurostat and ECB calculations. Note: T represents the peak in GDP before the respective recessions. The dates of the peaks are Q1 1980, Q1 1992 and Q1 2008

# Chart E Comparison of developments in value added across the services sub-sectors in the current recession



Sources: Eurostat and ECB calculations. Note: T represents the peak in GDP before the 2008 recession (Q1 2008). To sum up, every recession period has its unique character. The current recession appears to have started with mild declines in a historical perspective. However, the decline in activity gained considerable speed in the fourth quarter of 2008. The simultaneous output declines in the euro area and abroad and the broader effects of the financial turmoil have combined into producing a recession, which, in terms of loss of output, appears to be becoming the most severe, at least since the 1970s. Whereas output in the manufacturing sector traditionally suffers the largest falls and services sector activity usually slows but does not decline, currently one can observe simultaneous declines in both sectors. In the industrial sector, they overtake the largest falls observed since the 1970s. The services sector shows the worst performance since measurement began, dating back to the 1980s.